

## **REMARKS**

### **Claim Amendments**

Claim 7 is amended by replacing “consisting essentially of” with the originally worded “comprises.” Then, after the step of making olefins, the phrase “removing oxygenates from the olefin stream by the steps consisting essentially of” derived from the specification as filed at, for example, paragraph [0012] and Figure 1, is added. The phrase “one or more times” also derives from the same place in the specification. No new matter is added.

### **Section 103 Rejections**

The Examiner maintains the rejection of claims 7-15 under 35 U.S.C. § 103(a) as being unpatentable over US 6,303,841 to *Senetar et al.* The Applicant traverses, as the process in *Senetar* requires an absorbent step that is excluded from Applicant’s claims. The claim has been amended to use the term “consisting of” in describing the oxygenate removal steps.

In particular, *Senetar* describes a process that includes an adsorption step using, for instance, a caustic solution. With reference to Figure 2 of *Senetar*, there is a separate CO<sub>2</sub> removal step (122) using an absorbent. Applicant, on the other hand, claims a process of removing oxygenates from a raw olefin stream that does not include an absorbent step.

In viewing the Applicant’s specification, it is clear that the intent of the invention is to avoid absorbents. In the “Background” at paragraph [0003], the Applicant states that:

For this reason a costly secondary purification of the reaction product is necessary. One oxygenate that is particularly to be taken into account is dimethyl ether (DME), since it is one of the lightest oxygenates and behaves similarly to C<sub>3</sub> in distillation processes. Moreover, it is only slightly polar, so it can be difficult to remove by absorption. Accordingly, it would be beneficial to find additional methods to more easily remove oxygenates from olefins, particularly from an olefin stream synthesized from methanol.

To reiterate, the Applicant is taking special account of the presence of DME which cannot be removed by absorbents such as disclosed in *Senetar*, the presence of which only adds to the cost of the system without corresponding benefit. On the other hand, the Applicant is not as concerned with removing carbon dioxide as in *Senetar*.

The additional absorbent contact step of *Senetar* (step 122 in Figure 2) would add to the cost of the process and may introduce a hindrance to continuous production, as the absorbent would need to be regularly replaced and/or regenerated as described in paragraph [0010].

The Applicants avoid the Examiner's objection to the use of the phrase "consisting essentially of." The Applicants contend that a *prima facie* case of obviousness does not exist with respect to the amended claims. Thus, Applicants request that this rejection be withdrawn.

Applicants believe that the foregoing is a full and complete response to the Office Action of record. For the foregoing reasons, Applicants submit that the present claims meet all the requirements for patentability. Accordingly, an early and favorable reconsideration of the rejection, and allowance of the pending claims is requested. The Commissioner is hereby authorized to charge Applicant's Deposit Account No. 05-1712 (Docket #: 2001B133), for any fees, including extension of time fees and excess claim fees, required to make this response timely and acceptable to the Office.

Respectfully submitted,

November 10, 2009

Date

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